

REMARKS

Receipt of the Office Action of October 21, 2009 is gratefully acknowledged.

Claims 11 - 22 have been presented for examination. These claims were presented by the Preliminary Amendment filed with the application on October 31, 2005. The examination should have been conducted for claims 11 - 22 and not 1 - 11 which were cancelled.

Accordingly, the rejections noted by the examiner of claims 1 - 11 are considered moot. Notwithstanding this fact, and in order to advance prosecution, the claims have been amended in order to insure that the invention is clearly defined. In this regard, claim 12 has been amended to include the subject matter of claims 13, 15 and 16. In view of this amendment, claims 13, 15 and 16 have been cancelled.

Regarding the question of definiteness of the claims under 35 U.S.C. 112, applicant cannot agree with the examiner in that the specification of the invention would not enable a person skilled in the art to use the invention commensurate in scope with the claims. The scope of the invention is to provide a measurement device energy supply that can be used in explosion-endangered areas. Claim 1, and claim 11 describe such an energy supply unit that contains at least one voltage limiting unit and/or current limiting unit wherein the voltage limiting unit limits arising voltages and the current limiting unit limits arising currents so that arising voltages, currents and/or heating associated with the latter remain below a dangerous value. An example for a possible embodiment of a current limiting unit and a voltage limiting unit in combination with an energy source is seen in Figure 2 and its description. In that example, four drop resistors function as current and voltage limiting units. Therefore, a person skilled in the art is given

all the information necessary for carrying out the invention in order to achieve its object.

Then regarding the references, note that Blanchard (US 3797311) discloses a fluid level meter with a safety barrier which is located between the sensor and the power supply. The barrier limits the supply of excessive voltage or current to the sensors from the power supply via the sensor driving circuit. The aim of this is, like in the invention, the prevention of explosion or fire if operated in an explosion-endangered area. But Blanchard does not disclose the features of claim 12 as now amended. Blanchard gives no hint to an energy supply unit that includes a capsule unit, in which an energy source, and a current limiting unit and/or a voltage limiting unit are located. The scope of the invention disclosed by Blanchard is to prevent too large currents or voltages between the power supply and the sensors. If the power supply is a battery, it cannot be exchanged in the dangerous area. If an exchange is necessary, the whole measuring device has to be removed from the hazardous area. The present invention allows the energy source to be exchanged in a hazardous area in a secure way without requiring a removal of the sensor. In detail, capsule unit and current and/or voltage limiting units are so designed that the capsule unit can be removed and the current supply be exchanged while security is maintained.

Wilson (US 3968407) discloses an instrument, e.g. a corrosion ratemeter, which is located within a safe area and is connected to a safety barrier by a cable which includes several conductors. The safety barrier is connected to a probe in a hazardous area via a second cable with several conductors.

In contrast, the present invention relates to an energy supply unit and a measuring device that may both be located in a hazardous area, so that none of the described parts is located in a safe area. The "safety barrier" according to the present invention is contained in the energy supply unit and does therefore not

form a barrier between a hazardous area and a safe one, but limits the currents and/or heating associated therewith and/or voltages in an energy supply unit that is located completely in a hazardous area. Moreover, the energy supply unit contains a capsule unit with an energy source, so that an exchange of the energy source is possible even in an explosion-endangered area.

It is unclear where the energy supply unit or the power supply for the instrument disclosed by Wilson is situated. There are two possibilities, either it is located in the safe area or it is located in the hazardous area. In the first case, the problem of exchanging the power supply does not emerge, as in a safe area even batteries may be exchanged without any problems. In the latter, an exchange of the power supply would be dangerous, but Wilson gives no hint to that problem and consequently no solution to it. Hence, the field of endeavor of invention of Wilson as well as the scope of the invention differs from that of the present invention. Amended claim 12, which now emphasizes the differences between the state of the art and the present invention cannot be found in the description of the invention by Wilson.

Accordingly, neither Blanchard nor Wilson, alone or in combination can render the present state of the claims unpatentable.

In view of the foregoing, reconsideration and re-examination are respectfully requested and claims 12, 14 and 17 - 22 found allowable.

Respectfully submitted,

BACON & THOMAS, PLLC

A handwritten signature in black ink, appearing to read 'Felix J. D'Ambrosio', with a long horizontal flourish extending to the right.

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